

REMARKS

Claims 1-26 have been canceled. New Claims 27-54 remain active in the case.

Reconsideration is respectfully requested.

The present invention relates to a polyurethane powder coating material comprising polyureas, polyesters and crosslinkers.

Claim Amendments

Claims 1-26 have been canceled in favor of new Claims 27-54. New Claim 27 corresponds to original Claim 1, but specifies that the amount of succinic acid employed to prepare polyester B) must range from 1 to 14 mol %. Support for this limitation can be found on page 4, lines 31-33. This section of the text also provides support for the subject matter of new Claims 42 and 43.

Claim 27 also corrects component (C) by stating that the isocyanurates are blocked isocyanurates as disclosed at page 6, lines 11-14 of the text. Entry of the amendments and new claims is respectfully requested.

Invention

The present invention is directed to a polyurethane powder coating material that comprises A) 3 – 25 % by weight of polyurea, B) 35 – 75 % by weight of at least one amorphous and/or (semi)crystalline polyester synthesized from at least one polyol and at least one polycarboxylic acid and/or their ester(s) and/or anhydride(s) having an OH number of 5-250 mg KOH/g and a melting point ranging from 50 to 130° C; C) 5 – 30 % by weight of at least one curing agent based on blocked polyisocyanate(s), isocyanurate(s) and/or uretdiones having a functionality of at least 2, D) 0.5 – 50 % by weight of at least one auxiliary(ies) and/or additive(s), the fraction of succinic acid or its anhydride in component B) ranging

from 1 to 14 mol % and there being from 0.5 to 1.2 NCO groups of component C) available per OH group of component B).

Double Patenting Rejection

Claims 16-26 stand provisionally rejected base on the judicially created doctrine of obviousness-type double patenting over Claims 1-20 of copending application Serial No. 10/622,639. This ground of rejection is respectfully traversed.

It is clear from claims 1-20 of the copending case that the invention claimed therein is similar to the method and coated object aspects of the present invention claimed in Claims 44-54. Both the claimed method and coated object claims of the copending case recite a polyurethane powder coating material that comprises A) 3 – 25 % by weight of polyurea, B) 35 – 75 % by weight of at least one amorphous or (semi)crystalline polyester having an OH number of 5-250 mg KOH/g and a melting point ranging from 50 to 130° C; C) 5 – 30 % by weight of at least one curing agent based on one or more blocked polyisocyanates, blocked isocyanurates and uretdiones having a functionality of at least 2 and D) 0.5 – 50 % by weight of auxiliaries and additives, wherein component (C) has from 0.5 to 1.2 NCO groups available per OH group of component (B) and wherein the metal substrate is a metal coil. However, what the claims of the copending application do not mention and require is that, not only must the polyester (B) component be prepared from a polycarboxylic acid material that must include succinic acid as a reactant, but also that the succinic acid must be present in a specific range in terms of mole % of the polycarboxylic acid reactant. Thus, the present claims are distinguished over the claims of the patent on the basis that the content of succinic acid in the polycarboxylic acid reactant must range from 1 to 14 mole %. One of skill in the art, further, would not be led by the claims of the copending application to specifically use succinic acid, especially in a specific minor amount, as one of the polycarboxylic acid

reactants in the preparation of the polyester component. Accordingly, the method and coated object claims of the present application are not obvious over the claims of the copending application, and withdrawal of the rejection is respectfully requested.

Claims 1-26 stand provisionally rejected base on the judicially created doctrine of obviousness-type double patenting over Claims 1-16 of Grenda et al, U. S. Patent 6,710,136. This ground of rejection is respectfully traversed.

The claims of the patent are clearly relevant to the claims of the present application, because the Claims 1-16 of the patent are directed to a matt polyurethane powder coating material that comprises A) 3 – 25 % by weight of polyurea, B) 35 – 75 % by weight of at least one polyester having an OH number of 5-250 mg KOH/g, C) 7 – 25 % by weight of at least one curing agent of a blocked polyisocyanate, a blocked isocyanurate and a uretdione having a functionality of at least 2 and D) 1 – 50 % by weight of auxiliaries and additives, wherein from 0.6 to 1.2 NCO groups are available per OH group of component (B). A requirement of the claims is that the polyester component (B) must be prepared from a carboxylic acid reactant that is comprised of from 15 to 100 mole % of succinic acid. In fact, the German equivalent of the U. S. Patent is discussed in the specification of the present application at the bottom of page 2. Accordingly, it is clear that the claims of the present application are distinguished over the claims of the patent in that the present claims require the polyester component to be prepared from a polycarboxylic acid reactant that is comprised of 1 to 14 mole % of succinic acid. In view of this clear distinction between the claims of the patent and the claims of the present application, it is believed that the obviousness double patenting rejection is overcome, because one of skill in the art, considering the claims of the patent, would not be led to modify the acid reactant of the polyester in a manner completely opposite to the requirement of the claims of the patent to a low amount of succinic acid below

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the minimum 15 mole % amount of succinic acid. Accordingly, withdrawal of the rejection is respectfully requested.

As to the matter of the rejection of the present claims based on 35 USC 102(e), applicants refer to the discussion immediately above where it is pointed out that the present claims require that the polycarboxylic acid reactant specifically be comprised of 1 to 14 mole % of succinic acid. This amount of succinic acid in the polycarboxylic acid reactant employed to prepare the polyester component is quite clearly not taught or suggested by the patent. Thus, not only is the anticipatory ground of rejection obviated, but also the obviousness ground of rejection of paragraph 6 of the Office Action. Accordingly, withdrawal of the rejection is respectfully requested.

Applicants traverse the rejections of the present claims as anticipated and obviated by the disclosure of the published U. S. application of the Grenda et al patent for the same reasons discussed immediately above. Accordingly, withdrawal of the rejections of paragraphs 7 and 8 of the Office Action is respectfully requested.

It is now believed that the application is in proper condition for allowance. Early notice to this effect is earnestly solicited.


Respectfully submitted,

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